

PATENT CLAIMS

1. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible, **characterized by** that the time interval is limited within which the fuse can be activated and
5 ignite the mixture filled in initial part (2), in a way that initial part (2) is brought in contact with the aggressive matter, which corrodes its walls and comes in contact with the initial mixture filled in initial part (2), mixes with it, neutralizes it and prevents its ignition.
2. Supplement to mines by which the time period is limited within which the
10 activation of mines after their placing is possible according to claim 1, **characterized by** that the supplement to mines in version A consists of: little pipe with sharp point (A) and cylindrical housing (B), which has in its lower part ampoule (C) filled with aggressive matter, and the upper wall of ampoule (C) is thinned by annular groove (C2), while at the lower side
15 the ampoule is closed by disc shaped cover (C1); that the supplement to mines in version B consists of: initial part (2B) and cylindrical housing (D), which in its lower part has ampoule (D2) filled with aggressive matter, and the upper wall of the ampoule is thinned by annular groove (D3), while at the lower side the ampoule is closed by disc shaped cover (D1).
- 20 3. Supplement to mines by which the time period is limited within which the activating of mines after their placing is possible according to claim 2, **characterized by** that mentioned little pipe with sharp point (A) is put on initial part (2) and serves to brake the wall of ampoule (C) by its sharp point and that during the breaking of ampoule (C) it protects initial
25 part (2) that is sensitive to the pressure, it is of cylindrical shape, in the lower side made in pyramid form and with this sharp point it breaks ampoule (C), it is made of a material that is resistant to the corrosion by the aggressive matter filled in ampoule (C), on its upper end it has a hat shaped widening and by this hat it leans against mine activating mechanism (1), in
30 its upper part it is made with the conical widening of the outer wall in a way that at the screwing-in of activating mechanism (1) the little pipe with sharp

point enters into cylindrical housing (B) and by that the impermeability is ensured and the undesired leakage or evaporation of the aggressive matter spilt after the breaking of ampoule (C) is prevented, little pipe with sharp point (A) has on its body the bores through which the aggressive matter after the breaking of ampoule (C) enters into little pipe with sharp point (A), comes to initial part (2) and corrodes it walls.

4. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 3, **characterized by** that mentioned cylindrical housing (B) serves for placing ampoule (C) and retaining the aggressive matter after the breaking of ampoule (C), it is made of a material resistant to the corrosion of the aggressive matter filled in ampoule (C), it is of cylindrical shape with a hat shaped widening on its upper part and by this hat it leans against the bore for the placement of activating mechanism (6) into which cylindrical housing (B) is placed, and, as its part, from the inner side the upper wall of ampoule (C) is made, which is thinned by annular groove (C2) for its easier breaking.

5. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 4, **characterized by** that mentioned ampoule (C) is placed on the bottom of cylindrical housing (B) and made as its part, it serves for storing the aggressive matter that after its breaking slowly corrodes the wall of initial part (2).

6. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 2, **characterized by** that mentioned cover (C1) is placed at the lower side of cylindrical housing (B) and serves for closing cylindrical housing (B) after being filled with the aggressive matter.

7. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 2, **characterized by** that mentioned initial part (2B) serves for storing the initial explosive and for breaking ampoule (D2), it is of cylindrical shape

and at the lower side made in the form of a sharp point by which it breaks through ampoule (D2), it is made of a material that can be corroded through by the aggressive matter filled in ampoule (D2), it is part of the assembly of activating mechanism (1) and, when activating mechanism (1) is screwed into mine body (3), the sharp point of initial part (2B) is pointed into the upper wall of the ampoule and breaks it.

8. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 2, **characterized by** that mentioned cylindrical housing (D) serves for placing ampoule (D2) and retaining the aggressive liquid after breaking ampoule (D2), it is placed in the mine in bore (6), it is made of a material resistant to the corrosion of the aggressive matter filled in ampoule (D2), it is of cylindrical shape with a hat shaped widening on its upper part, and by this hat it leans against bore (6) in mine body (3), and, as its part, at the inner side the upper wall of ampoule (D2) is made, which is for an easier breaking thinned by annular groove (D3).
9. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 7, **characterized by** that mentioned ampoule (D2) is placed on the bottom of cylindrical housing (D), made as its part and serving for storing the aggressive matter that after its breaking corrodes the wall of initial part (2B).
10. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 2, **characterized by** that mentioned cover (D1) is placed at the lower side of cylindrical housing (D) and serves for closing cylindrical housing (D) after being filled with the aggressive matter.

AMENDED CLAIMS

[Received by the International Bureau on 29 March 2005 (29.03.05):
original claims 1-10 replaced by amended claims 1-10 (4 pages)]

NEW PATENT CLAIMS

1. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible, **characterized by** that the mentioned supplement limits the time period within which it is possible to activate the explosive material by which the mine is filled, where the duration of this time period can be precisely adjusted and it starts to run in the instant of setting initial part (2) into the explosive material i.e. into the mine, in a way that in that instant initial part (2) comes in contact with the aggressive substance, which corrodes the walls of initial part (2) and, when they are corroded through, then it comes in contact and mixes with the initial mixture by which initial part (2) is filled, neutralizes it, i.e. makes it inactive, sterile and prevents its ignition, and by that also the mine explosion after the adjusted time has expired.
2. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 1, **characterized by** that the supplement to mines in version A consists of: little pipe with sharp point (A) and cylindrical housing (B), which has in its lower part ampoule (C) filled with aggressive matter, and the upper wall of ampoule (C) is thinned by annular groove (C2), while at the lower side the ampoule is closed by disc shaped cover (C1); that the supplement to mines in version B consists of: initial part (2B) and cylindrical housing (D), which in its lower part has ampoule (D2) filled with aggressive matter, and the upper wall of the ampoule is thinned by annular groove (D3), while at the lower side the ampoule is closed by disc shaped cover (D1).
3. Supplement to mines by which the time period is limited within which the activating of mines after their placing is possible according to claim 2, **characterized by** that mentioned little pipe with sharp point (A) is put on initial part (2) and serves to brake the wall of ampoule (C) by its sharp point and that during the breaking of ampoule (C) it protects initial

part (2) that is sensitive to the pressure, it is of cylindrical shape, in the lower side made in pyramid form and with this sharp point it breaks ampoule (C), it is made of a material that is resistant to the corrosion by the aggressive matter filled in ampoule (C), on its upper end it has a hat shaped widening and by this hat it leans against mine activating mechanism (1), in its upper part it is made with the conical widening of the outer wall in a way that at the screwing-in of activating mechanism (1) the little pipe with sharp point enters into cylindrical housing (B) and by that the impermeability is ensured and the undesired leakage or evaporation of the aggressive matter spilt after the breaking of ampoule (C) is prevented, little pipe with sharp point (A) has on its body the bores through which the aggressive matter after the breaking of ampoule (C) enters into little pipe with sharp point (A), comes to initial part (2) and corrodes it walls.

4. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 3, **characterized by** that mentioned cylindrical housing (B) serves for placing ampoule (C) and retaining the aggressive matter after the breaking of ampoule (C), it is made of a material resistant to the corrosion of the aggressive matter filled in ampoule (C), it is of cylindrical shape with a hat shaped widening on its upper part and by this hat it leans against the bore for the placement of activating mechanism (6) into which cylindrical housing (B) is placed, and, as its part, from the inner side the upper wall of ampoule (C) is made, which is thinned by annular groove (C2) for its easier breaking.
5. Supplement to mines by which the time period is limited within which the activation of mines after their placing is possible according to claim 4, **characterized by** that mentioned ampoule (C) is placed on the bottom of cylindrical housing (B) and made as its part, it serves for storing

- 60 the aggressive matter that after its breaking slowly corrodes the wall of
initial part (2).
6. Supplement to mines by which the time period is limited within which the
activation of mines after their placing is possible according to claim 2,
characterized by that mentioned cover (C1) is placed at the lower
65 side of cylindrical housing (B) and serves for closing cylindrical housing (B)
after being filled with the aggressive matter.
7. Supplement to mines by which the time period is limited within which the
activation of mines after their placing is possible according to claim 2,
characterized by that mentioned initial part (2B) serves for storing
70 the initial explosive and for breaking ampoule (D2), it is of cylindrical
shape and at the lower side made in the form of a sharp point by which it
breaks through ampoule (D2), it is made of a material that can be
corroded through by the aggressive matter filled in ampoule (D2), it is
part of the assembly of activating mechanism (1) and, when activating
75 mechanism (1) is screwed into mine body (3), the sharp point of initial
part (2B) is pointed into the upper wall of the ampoule and breaks it.
8. Supplement to mines by which the time period is limited within which the
activation of mines after their placing is possible according to claim 2,
characterized by that mentioned cylindrical housing (D) serves for
80 placing ampoule (D2) and retaining the aggressive liquid after breaking
ampoule (D2), it is placed in the mine in bore (6), it is made of a material
resistant to the corrosion of the aggressive matter filled in ampoule (D2),
it is of cylindrical shape with a hat shaped widening on its upper part, and
by this hat it leans against bore (6) in mine body (3), and, as its part, at
85 the inner side the upper wall of ampoule (D2) is made, which is for an
easier breaking thinned by annular groove (D3).
9. Supplement to mines by which the time period is limited within which the
activation of mines after their placing is possible according to claim 7,
characterized by that mentioned ampoule (D2) is placed on the

90 bottom of cylindrical housing (D), made as its part and serving for storing
the aggressive matter that after its breaking corrodes the wall of initial
part (2B).

10. Supplement to mines by which the time period is limited within which
the activation of mines after their placing is possible according to claim 2,
95 **characterized by** that mentioned cover (D1) is placed at the lower
side of cylindrical housing (D) and serves for closing cylindrical housing
(D) after being filled with the aggressive matter.